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### **NMR study of the ordered state in $\text{UGa}_3$**

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The antiferromagnetic ordered state in  $\text{UGa}_3$  ( $T_N=67\text{K}$ ) has not been clarified completely. Neutron scattering measurements suggest a type-II antiferromagnetic ordered state with  $q=(1/2,1/2,1/2)$ , however, Ga-NMR spectra in the ordered state cannot be explained by such a simple ordered state [1]. This may indicate an accompanying orbital order at the transition. Indeed a recent magnetic x-ray scattering study suggests two different transition temperatures (67K and 62K) which are also seen in the NMR spectra at zero field. We will discuss the unusual order in  $\text{UGa}_3$  based on changes in the Ga-NMR spectra as a function of temperature.

1) K. Ikushima et al. JPSJ to be published.

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